

## Introduction

**This study investigates the role of psychological closeness—feelings of social proximity and intimacy toward a familiar person—in spatial perception and awareness.**

- While spatial perception research has traditionally focused on visual cues used to judge distances to objects, recent research has demonstrated that a variety of non-visual cues (i.e. physical, motivational, and emotional factors) influence how we see our environment and objects within it.
- Bioenergetics: Heavy backpack or treadmill-use causes targets to be judged as farther (Proffitt et. al., 2003) and hills as steeper (Proffitt et. al., 1995).
- Wishful Seeing: Objects we consider more desirable are seen as closer in proximity than those that we consider less desirable (Balcetis & Dunning, 2010).
- We asked participants to think about two target persons at separate times: their best friend and a stranger (a confederate named Alex).
- Participants then viewed a target (silhouette) that represented either the participant's best friend or a stranger at varied distances within action space.

**Hypotheses: Participants will estimate a silhouette representing the person of greater psychological closeness (the best friend) to be closer in egocentric proximity than a silhouette representing a stranger (Alex).**

## Method

**2 (level of psychological closeness: friend, stranger) x 3 (target distance: 2m, 5m, 8m) mixed measures design**

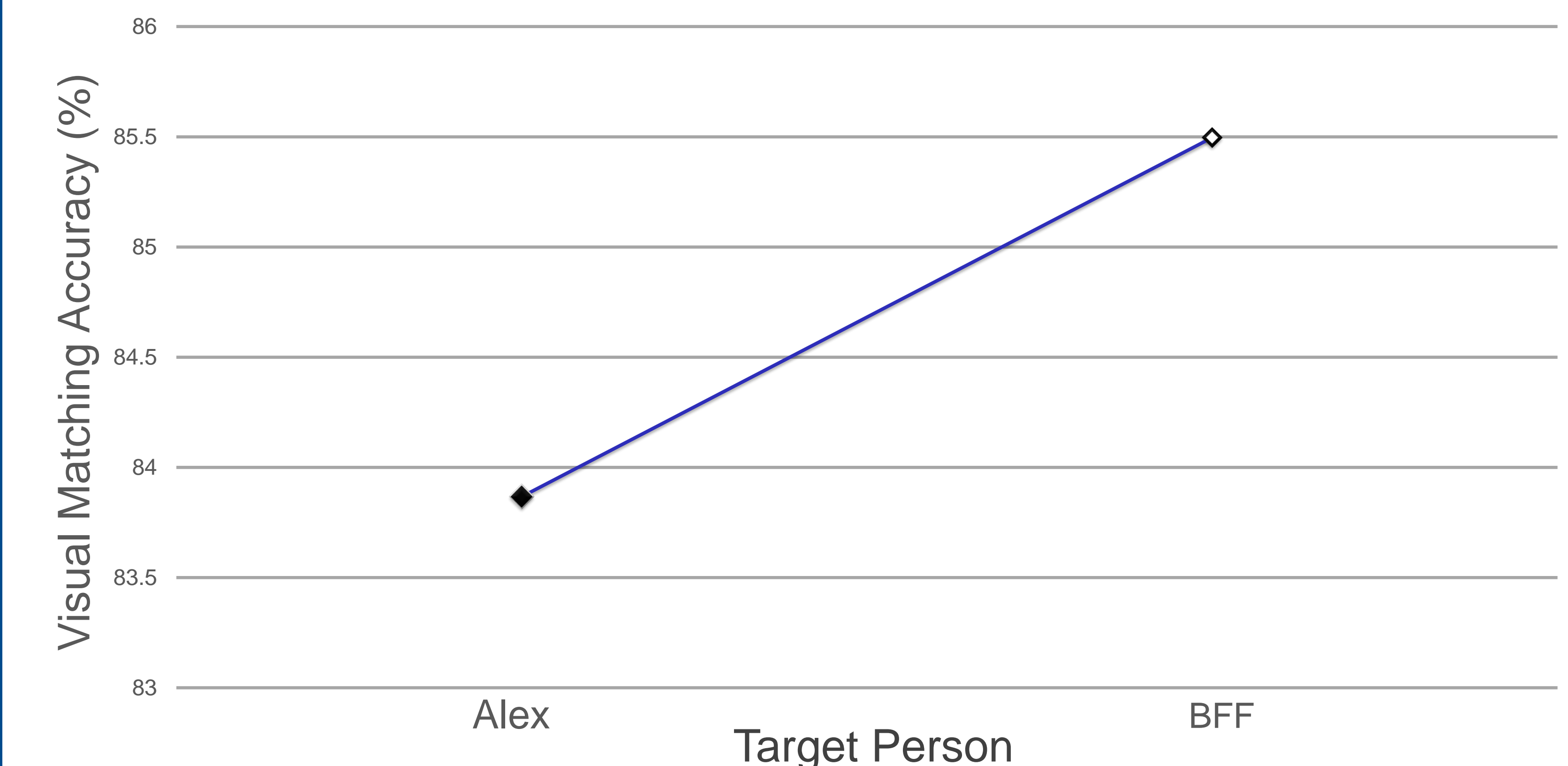
- Participants ( $N=35$ ) completed demographics as well as a questionnaire about the participant's best friend to prime thoughts about the friend.
- Participants also received a photo of and info about stranger-Alex (matched to participant's sex); completed a similar questionnaire to the one regarding the best friend.
- After each questionnaire (best friend/Alex) participants completed distance perception measurements using two methods.



- Silhouette representing best friend/Alex placed at distances of 2, 5, or 8m (all randomized for each target); distances judged in two ways:
  - Estimated distance to stimulus using visual matching task
  - Blind walked to previously seen target location

## Results

- Calculated mean accuracy across distances for each target's visual matching estimates:



- Differing levels of psychological closeness between the two targets resulted in a trend toward significance ( $p=0.091$ ), with participants' judged distances to targets representing their best friends ( $M=83.87\%$ ) being closer than targets representing stranger-Alex ( $M=85.50\%$ ).

## Discussion and Future Directions

- These findings add to the increasing appreciation of the interplay between the social and cognitive aspects of perception by showing that our social affiliations may influence spatial perception and awareness.
- Future direction: Conceptual replication to study the effect of artificially-constructed acquaintanceships through mutual disclosure on visual perceptions of distance.

## References

- Proffitt, D. R. (2006). Embodied perception and the economy of action. *Perspectives on Psychological Science*, 1, 110–122. doi:10.1111/j.1745-6916.2006.00008.x
- Balcetis, E., & Dunning, D. (2010). Wishful seeing: Desired objects are seen as closer. *Psychological Science*, 21, 147-152. doi:10.1177/0956797609356283